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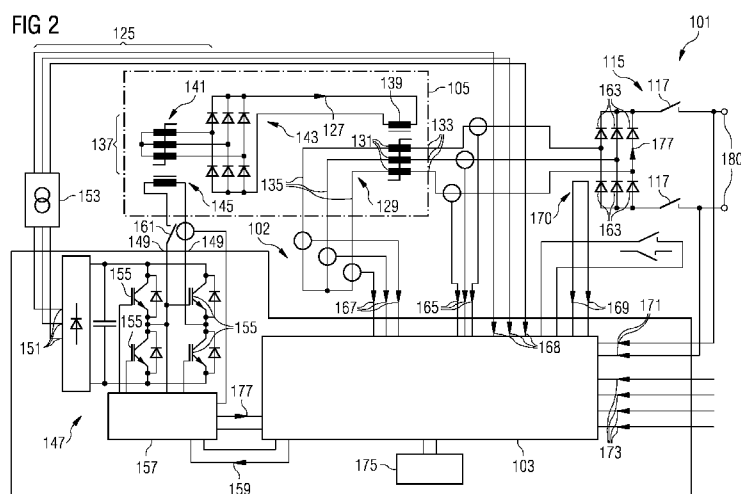
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(54) **Title:** SYNCHRONOUS GENERATOR CONTROL, GENERATOR SYSTEM AND VESSEL ENERGY SYSTEM



(57) **Abstract:** It is described an arrangement (102) for controlling a synchronous generator (105) having a stator (129) comprising at least one stator winding (131) and having a rotor (137) with an electromagnet (139) driven by a field current (127), the rotor (137) being rotatable relative to the stator (129), the electromagnet (139) being inductively coupled to the stator winding (131), the arrangement (102) comprising: a measurement system adapted to measure at least one quantity (167, 165, 168, 169, 171); and a controller (103) adapted to cause shutting down the field current (127), if the quantity satisfies at least one criterion associated with at least one malfunction.

